STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Maine Army National Guard	)	**Departmental**
Penobscot County	)	**Findings of Fact and Order**
Bangor, Maine	)	**Air Emission License**
A-755-71-F-R	)	

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Maine Army National Guard (MEARNG) of Bangor, Maine has applied to renew the Air Emission License for their Bangor facilities. MEARNG operates several vehicle maintenance buildings, an aircraft maintenance hangar, housing, armory buildings, and a Reserve Center.

B. MEARNG is applying to include the operation of the following equipment to its Air Emissions License:

Boilers

Equipment ID	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manufacture	Stack #
Boiler 250-1	1.54	11.0 gal/hr	#2, 0.5%	1986	250-A
Boiler 260-1	1.14	1118 cf/hr	Natural Gas	2002	260-A
		8.2 gal/hr	#2, 0.5%		
Boiler 260-2	4.4	4314 cf/hr	Natural Gas	2002	260-A
		31.5 gal/hr	#2, 0.5%		
Boiler 260-3	4.4	4314 cf/hr	Natural Gas	2002	260-A
		31.5 gal/hr	#2, 0.5%		
Boiler 260-4	4.4	4314 cf/hr	Natural Gas	2002	260-A
		31.5 gal/hr	#2, 0.5%		
Boiler 345-1	1.75	12.5 gal/hr	#2, 0.5%	1981	345-A
Boiler 346-1	1.75	12.5 gal/hr	#2, 0.5%	1980	346-A
Boiler 255-1	1.3	9.3 gal/hr	#2, 0.5%	1986	255-A
Boiler AFRC-1	4.55	32.5 gal/hr	#2, 0.5%	1994	AFRC-A
Boiler AFRC-2	4.55	32.5 gal/hr	#2, 0.5%	1994	AFRC-A

Boilers 260-1, 260-2, 260-3 and 260-4 have dual fuel (oil and natural gas) burners, but there is currently no piping or provisions to operate the boilers with #2 fuel oil at this time.

Diesel Generators

Equipment	Maximum Capacity (MMBtu/hr)	Power Output (kW)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur
DG 260	4.9	500	34.8	Diesel, 0.05%
260 FP1	1.4	-	10.2	Diesel, 0.05%
260 FP2	1.4	-	10.2	Diesel, 0.05%
260 FP3	1.4	-	10.2	Diesel, 0.05%

C. Application Classification

The application for MEARNG does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005).

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 1, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. #2 Oil Fired Boilers

MEARNG operates six boilers that fire only #2 fuel oil. These boilers are designated Boilers 250-1, 345-1, 346-1, 255-1, AFRC-1 and AFRC-2. MEARNG also operates 4 duel fuel firing boilers, designated Boilers 260-1, 260-2, 260-3 and 260-4, which are licensed and equipped to fire natural gas, #2 fuel oil and K1 kerosene.

All of the boilers at the MEARNG facility have maximum heat input capacities below the applicability threshold and are therefore not subject to EPA New Source Performance Standards (NSPS) 40 CFR Subpart Dc, for boilers with a heat input of 10 MMBtu/hr or greater and manufactured after June 9, 1989.

The MEDEP Bureau of Air Quality has determined that BPT/BACT for sulfur content of #2 fuel oil is the use of #2 fuel oil that meets the sulfur content criteria found in ASTM D396 for #2 fuel oil (0.5% sulfur by weight). Compliance with the sulfur restrictions shall be demonstrated by fuel receipts or supplier certification indicating sulfur content or certification indicating that the fuel meets the sulfur content criteria found in ASTM D396 for #2 fuel oil.

A summary of the BPT analysis for Boilers 250-1 (1.54 MMBtu/hr), 345-1 (1.75 MMBtu/hr), 346-1 (1.75MMBtu/hr), 255-1 (1.3 MMBtu/hr), AFRC-1 (4.55MMBtu/hr) and AFRC-2 (4.55MMBtu/hr), as well as Boilers 260-1, 260-2, 260-3 and 260-4 during periods when these boilers are firing #2 fuel oil, is as follows:

1. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103, (last amended November 3, 1990) regulates PM emission limits. The PM emission limit for each boiler is 0.12 lb/MMBtu. PM_{10} emission limits are derived from PM limits.
2. *Low Sulfur Fuel*, 06-096 CMR 106 (last amended July 4, 1999) regulates fuel sulfur content for liquid fossil fuels. However, SO_2 emissions are based on the firing of #2 fuel oil which meets the sulfur content criteria found in ASTM D396 for #2 fuel oil (0.5% sulfur by weight).
3. NO_x emission limits are based on data from similar #2 fuel oil fired boilers of this size and age.
4. CO and VOC emission limits are based upon AP-42 data dated 9/98.
5. Visible emissions from the boilers are subject to *Visible Emissions Regulation*, 06-096 CMR 101 (last amended May 18, 2003). Visible emissions from each #2 fuel oil fired boiler stack shall not exceed 20% opacity on a six-minute block average except, for no more than 2 six-minute block averages in a 3-hour period.

C. Natural Gas Fired Boilers

MEARNG operates 4 duel fuel fired boilers, designated 260-1, 260-2, 260-3, and 260-4. These boilers are licensed and equipped to fire #2 fuel oil and K1 kerosene as well as natural gas. Due to their small sizes, the natural gas/#2 fuel oil fired boilers are not subject to EPA New Source Performance Standards (NSPS) 40 CFR 60 Subpart Dc.

A summary of the BPT analysis for Boilers 260-1 (1.14 MMBtu/hr), 260-2 (4.4 MMBtu/hr), 260-3 (4.4 MMBtu/hr) and 260-4 (4.4 MMBtu/hr) during periods when these boilers are firing natural gas, is as follows:

1. 06-096 CMR 103 regulates PM emission limits. However, BPT in this case the BPT determination of 0.05 lb/MMBtu is more stringent, and shall be used for all natural gas fired boilers. PM_{10} limits are derived from the PM limits.
2. SO_2, NOx, CO and VOC emission limits are based on AP-42 data dated 10/96.
3. Visible emissions from the boilers are subject to 06-096 CMR 101. Visible emissions from each of the natural gas fired stacks, during periods when the boilers are firing only natural gas, shall not exceed 10% opacity on a 6-minute block average, except for no more than one 6-minute block average in a 3-hour period.

D. Annual Boiler Fuel Limits

MEARNG is currently permitted to operate 10 boiler units, ranging in sizes from 1.14 MMBtu/hr to 4.55 MMBtu/hr, with 4 units capable of firing #2 fuel oil or natural gas and 6 units capable of firing only #2 fuel oil. MEARNG had amended the facility's Air Emission License (A-755-71-E-A) to establish a facility wide boiler heat input restriction of 35,000 MMBtu/yr. 35,000 MMBtu is the equivalent of 250,000 gallons of #2 fuel oil. Rather than restrict the facility to an annual fuel use restriction of 250,000 gallons per year of #2 fuel oil or the equivalent amount of natural gas, MEARNG shall continue to be subject to the 35,000 MMBtu/yr restriction. This will allow MEARNG the operational flexibility to burn either natural gas or #2 fuel oil at any time. 35,000 MMBtu/yr is approximately equal to 35,000,000 standard cubic feet (scf) of natural gas per year. Air Emission License amendment A-755-71-E-A also established that MEARNG shall include K1 kerosene as a permitted fuel to burn in the facility's boilers. K1 kerosene is an oil distillate comparable to #2 fuel oil in Btu content, with slightly cleaner burning characteristics.

Compliance with the facility wide boiler heat input restriction shall be documented via a fuel use record that will be maintained on a twelve-month rolling total basis. The fuel use record shall include the amount of fuel fired, either natural gas or #2 fuel oil, certification of meeting the sulfur content restrictions and/or ASTM D396 criteria for #2 fuel oil and calculations converting the fuel usage into MMBtu heat input.

Heat input shall be calculated using the following formulas:

1 For #2 fuel use: Heat input equals (#2 fuel usage (in gallons) x 140,000 Btu per gallon of #2 fuel)

2 For K1 Kerosene use: Heat input equals (K1 Kerosene usage (in gallons) x 135,000 Btu per gallon of K1 Kerosene)
3 For natural gas fuel use: Heat input equals (natural gas fuel usage (in scf) x 1020 Btu per scf of natural gas)

E. Emergency Diesel Fire Pumps

MEARNG operates three diesels driven emergency fire pumps, each with rated capacity of 1.4 MMBtu/hr. The fire pumps are for emergency use only, as defined in the following paragraph, and shall each be limited to 500 hours of operation per year on a twelve-month rolling total basis.

'Emergency' is defined in 06-096 CMR 100 and throughout this document as:

"... any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology based emission limitation under the license, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error."

BPT for the Emergency Diesel Fire Pumps (260 FP1, 260 FP2 and 260 FP3) is the following:

1. The emergency diesel fire pumps shall each be limited to 500 hr/year of operation based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours.
2. 06-096 CMR 106 (last amended July 4, 1999) regulates fuel sulfur content for liquid fossil fuels, however in this case the BACT analysis for SO_2 determines a more stringent limit of 0.05% is appropriate and shall be used.
3. PM are based upon AP-42 data dated 10/96. The PM_{10} limits are derived from the PM limits.
4. NOx, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from the emergency diesel fire pumps are subject to 06-096 CMR 101. Visible emissions from each emergency diesel fire pump shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than two 6-minute block averages in a 3-hour period.

F. Back-up Diesel Generator

MEARNG operates a back-up generator at their Bangor facility, designated DG 260. Back-up diesel generator DG 260 has a power output capacity of 500 kW (750 HP) firing diesel fuel at a rate of 34.8 gallons per hour (gal/hr).

In June, 2007, MEARNG amended their Air Emission License (A-755-71-E-A) to allow for the ability to run DG 260 to accommodate for OP-4 emergencies under ISO New England's Demand Response Program. MEARNG has requested that this permit also expand the operational restrictions on DG 260 to include periods during which ISO New England has requested that the facility operate the diesel generator under the Demand Response Program. In order for MEARNG to participate in this program, they will need to start and run their generator prior to, or in lieu of, loss of off-site power. MEARNG will only operate in this manner if there is a documented request from ISO New England under their emergency OP-4 procedures. ISO New England's OP-4 is a procedure which establishes criteria and guidelines for actions during capacity deficiencies. OP-4 is implemented when there is determined to be a serious threat to the integrity of the bulk power system. The Department has agreed to continue to redefine the terms of which MEARNG can operate their diesel generators to include ISO New England OP-4 emergencies.

MEARNG shall be limited to operating DG 260 no more than 500 hours per year, based on a twelve-month rolling total. Additionally, MEARNG shall be limited to operating DG 260 no more than 50 hours per calendar year in response to an OP-4 emergency. To demonstrate compliance with the hours of operation limit, MEARNG shall continue to maintain and operate the hour meter on DG 260 and shall maintain a log documenting the dates, times and reason of operation for DG 260 shall be kept. If the reason for operation was an OP-4 emergency, MEARNG shall include records documenting that MEARNG was contacted by ISO New England and asked to reduce consumption as part of an OP-4 emergency.

BPT for diesel engines requires the use of diesel fuel with a sulfur content of no greater than 0.05% sulfur by weight. Compliance with the fuel sulfur limit shall be demonstrated via fuel receipts from the supplier showing the quantity of fuel delivered and percent sulfur of the fuel.

A summary of the BPT analysis for DG 260 is the following:

1. MEARNG shall be limited to operating DG 260 no more than 500 hours per year, based on a twelve-month rolling total. Additionally, MEARNG shall be limited to operating DG 260 no more than 50 hours per calendar year in response to an OP-4 emergency.
2. 06-096 CMR 103 regulates PM emission limits however manufacturer specs provide more accurate emissions information. Emission limits are based on manufacturer spec data and shall be considered BACT. The PM_{10} limits are derived from the PM limits.
3. 06-096 CMR 106 regulates fuel sulfur content, however in this case a BPT analysis for SO_2 determined a more stringent limit of 0.05% was appropriate.
4. NO_x and CO emission limits are based on manufacturer spec data.

5. VOC emission limits are based upon AP-42 data dated 10/96.
6. Visible emissions from the boilers are subject to 06-096 CMR 101. Visible emissions from DG 260 shall not exceed 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period.

G. Liquid Organic Storage

MEARNG operates a number of above and below ground storage tanks, which are used to house #2 fuel oil, used oil, diesel fuel and JP-8 aviation fuel. The tanks range in size from 275 gallons to 25,000 gallons. None are large enough to be subject to EPA NSPS 40 CFR 60 Subpart Kb.

BPT for the storage tanks is the use of submerged fill pipes during filling of the tanks. MEARNG shall maintain the storm water runoff and spill containment system in case of accidental spills or leaks.

H. Solvent Degreaser (Parts Washers)

MEARNG makes use of two 34-gallon capacity parts washers units, designated Sink #1 (located in building FMS#3) and Sink #2 (located in building AASF). The parts washers use Safety Kleen MIL-PRF-680 (Naptha) solvent as the cleaning medium. The parts washers at the MEARNG facility are subject to Maine's rule *Solvent Degreasers*, 06-096 CMR 130.

MEARNG shall maintain a record of MIL-PRF-680 solvent use that shall include the amount of solvent added to the parts washers and the dates that the solvent was added. The record shall be maintained on a monthly and a twelve-month rolling total basis. For purposes of record keeping, the amount of solvent used shall be considered as the difference between the amount of solvent added and the amount of solvent removed.

In accordance with 06-096 CMR 130, Section 1(B), the following are exempt from the requirements of 06-096 CMR 130:

(1) A solvent cleaner using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mm Hg, or less, at 20° C (68° F);

(2) Wipe cleaning; and

(3) Cold cleaning machines using solvents containing less than or equal to 5% VOCs by weight.

If, in the future, MEARNG switches to a solvent that contains less than 5% VOC for use in the parts washers, to satisfy record keeping requirements MEARNG need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at their facility.

1. In accordance with 06-096 CMR 130, Section 3(A) and (B), MEARNG shall be subject to the following compliance standards:

   A. Immersion cold cleaning machines shall have a freeboard ratio of 0.75 or greater unless the machines are equipped with covers that are kept closed except when parts are being placed into or being removed from the machine.

   B. Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:

      (1) Have a permanent, conspicuous label summarizing the operating requirements in Subsection 3 below.

      (2) Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches shall constitute an acceptable cover.

      (3) Cold cleaning machines shall be operated in accordance with the following procedures:

         (a) Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container;

         (b) Cleaned parts shall be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cold cleaning machine;

         (c) Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray at a pressure that does not exceed 10 pounds per square inch gauge (psig);

(d) The owner or operator shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip;

(e) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the cold cleaning machine;

(f) When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used;

(g) Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately, and the wipe rags or other sorbent material shall be immediately stored in covered containers for disposal or recycling;

(h) Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and

(i) The owner or operator shall ensure that the solvent level does not exceed the fill line.

I. Annual Emissions

- Annual facility emissions for the facility boilers are calculated based on an annual heat input restriction of 35,000 MMBtu/yr for the worst case scenario of the boilers firing either #2 fuel oil, K1 kerosene or natural gas.
- Annual facility emissions for the emergency diesel pumps and the back-up generator (DG 260) are calculated based on an operation restriction of 500 hrs/yr.

Total Licensed Annual Emissions for the Facility
tons/year
(used to calculate the annual license fee)

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Boilers	2.1	2.1	8.8	6.1	0.6	0.1
DG 260	0.06	0.06	0.06	1.8	1.0	0.4
Fire Pumps	0.3	0.3	0.06	4.6	1.0	0.4
Degreaser	-	-	-	-	-	1.0
Total TPY	**2.5**	**2.5**	**8.9**	**12.5**	**2.6**	**1.9**

III. AMBIENT AIR QUALITY ANALYSIS

In accordance with 06-096 CMR 115, the level of air quality analyses required for a non major source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. An air quality analysis is not required for this amendment.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License amendment A-755-71-F-R, subject to the following conditions:

Severability: The invalidity or unenforceability of any provision, or part thereof, of this Air Emission License shall not affect the remainder of the provision or any other provisions. This Air Emission License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 CMR 115. [06-096 CMR 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

(i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or

b. pursuant to any other requirement of this license to perform stack testing.

(ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

(iii)submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

(i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

(ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(iii)the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions. [06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) #2 Fuel Oil Fired Boilers

A. MEARNG shall be restricted to firing #2 fuel oil that meets the sulfur content criteria found in ASTM D396 for #2 fuel oil (0.5% sulfur by weight). [06-096 CMR 115, BPT]

B. Compliance with the sulfur restriction shall be demonstrated by fuel receipts or supplier certification indicating sulfur content or certification indicating that the fuel meets the sulfur content criteria found in ASTM D396 for #2 fuel oil (0.5% sulfur by weight). [06-096 CMR 115, BPT]

C. Emissions from the boilers shall not exceed the following during periods of firing #2 fuel oil:

Equipment		PM	PM_{10}	SO_2	NO_x	CO	VOC
Boiler 250-1	lb/hr	0.2	0.2	0.8	0.5	0.06	0.01
Boiler 260-1	lb/hr	0.1	0.1	0.4	0.4	0.04	0.01
Boiler 260-2	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.5	0.5	1.6	1.5	0.2	0.01
Boiler 260-3	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.5	0.5	1.6	1.5	0.2	0.01
Boiler 260-4	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.5	0.5	1.6	1.5	0.2	0.01
Boiler 345-1	lb/hr	0.2	0.2	0.9	0.6	0.1	0.01
Boiler 346-1	lb/hr	0.2	0.2	0.9	0.6	0.1	0.01
Boiler 255-1	lb/hr	0.2	0.2	0.7	0.5	0.05	0.01
Boiler ARFC-1	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.5	0.5	2.3	1.6	0.2	0.01
Boiler ARFC-2	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.5	0.5	2.3	1.6	0.2	0.01

[06-096 CMR 115, BPT]

D. Visible emissions from each #2 fuel oil fired boiler stack, during periods when #2 fuel oil is being fired, shall not exceed 20% opacity on a six-minute block average except, for no more than 2 six-minute block averages in a 3-hour period. [06-096 CMR 101]

(17) Natural Gas Fired Boilers

A. Emissions from the boilers shall not exceed the following during periods of firing natural gas:

Equipment		PM	PM_{10}	SO_2	NO_x	CO	VOC
Boiler 260-1	lb/hr	0.06	0.06	0.001	0.1	0.09	0.1
Boiler 260-2	lb/MMBtu	0.05	-	-	-	-	-
	lb/hr	0.2	0.2	0.003	0.4	0.4	0.02
Boiler 260-3	lb/MMBtu	0.05	-	-	-	-	-
	lb/hr	0.2	0.2	0.003	0.4	0.4	0.02
Boiler 260-4	lb/MMBtu	0.05	-	-	-	-	-
	lb/hr	0.2	0.2	0.003	0.4	0.4	0.02

[06-096 CMR 115, BPT]

B. Visible emissions from each natural gas fired boiler stack, during periods when the boilers are firing only natural gas, shall not exceed 10% opacity on a 6-minute block average, except for no more than one 6-minute block average in a 3-hour period.

(18) Annual Boiler Heat Input Limit

A. MEARNG shall be restricted to a facility wide boiler heat input restriction of 35,000 MMBtu/yr based on a twelve-month rolling total basis. [06-096 CMR 115, BPT]

B. MEARNG shall maintain a fuel use log which shall include the amount of fuel fired, either natural gas, K1 kerosene or #2 fuel oil, and calculations converting the fuel usage into MMBtu heat input. Heat input shall be calculated using the following formulas:

1. For #2 fuel use: Heat input equals (#2 fuel usage (in gallons) x 140,000 Btu per gallon of #2 fuel)
2. For K1 Kerosene use: Heat input equals (K1 Kerosene usage (in gallons) x 135,000 Btu per gallon of K1 Kerosene)
3. For natural gas fuel use: Heat input equals (natural gas fuel usage (in scf) x 1020 Btu per scf of natural gas)

[06-096 CMR 115, BPT]

(19) Emergency Diesel Fire Pumps (260 FP1, 260 FP2 and 260 FP3)

A. MEARNG shall be restricted to firing diesel fuel with a sulfur content of no greater than 0.05% sulfur by weight in the emergency diesel fire pumps. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and percent sulfur of the fuel. [06-096 CMR 115, BPT]

B. MEARNG shall limit each emergency diesel fire pump to 500 hr/year of operation, based on a 12 month rolling total. An hour meter shall be maintained and operated on each diesel unit. [06-096 CMR 115, BPT]

C. MEARNG shall only operate the emergency diesel fire pumps for maintenance purposes or for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. A log documenting the dates, times, and reasons for operation of each emergency diesel fire pump shall be kept. [06-096 CMR 115, BPT]

D. Emissions from each emergency diesel fire pump shall not exceed the following:

Equipment		PM	PM_{10}	SO_2	NO_x	CO	VOC
Emergency Diesel Fire Pump	lb/hr	0.1	0.1	0.1	2.1	1.1	0.5

[06-096 CMR 115, BPT]

E. Visible emissions from each emergency diesel fire pump shall not exceed 20% opacity on a six (6) minute block average basis, except for no more than two 6-minute block averages in a 3-hour period. [06-096 CMR 101]

(20) Back-up DG 260

A. MEARNG shall be restricted to firing diesel fuel with a sulfur content of no greater than 0.05% sulfur by weight in DG 260. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and percent sulfur of the fuel. [06-096 CMR 115, BPT]

B. DG 260 shall only operate for maintenance purposes, for situations arising from sudden and reasonably unforeseeable events beyond the control of the source and ISO New England OP-4 emergencies. [06-096 CMR 115, BPT]

C. MEARNG shall be limited to operating DG 260 no more than 500 hours per year, based on a twelve-month rolling total. Additionally, MEARNG shall be limited to operating DG 260 no more than 50 hours per calendar year in response to an OP-4 emergency. [06-096 CMR 115, BPT]

D. MEARNG shall continue to maintain and operate the hour meter on DG 260 and shall maintain a log documenting the dates, times and reason of operation for DG 260 shall be kept. If the reason for operation was an OP-4 emergency, MEARNG shall include records documenting that MEARNG was contacted by ISO New England and asked to reduce consumption as part of an OP-4 emergency. [06-096 CMR 115, BPT]

E. Emissions from DG 260 shall not exceed the following:

Equipment		PM	PM_{10}	SO_2	NO_x	CO	VOC
DG 260	lb/MMBtu	0.05	-	-	-	-	-
	lb/hr	0.1	0.1	0.1	2.1	1.1	0.5

[06-096 CMR 115, BPT]

F. Visible emissions from DG 260 shall not exceed 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period. [[06-096 CMR 101]

(21) Solvent Degreasers (Parts Washers)

A. MEARNG shall maintain a record of Safety Kleen MIL-PRF-680 (Naptha) solvent use that shall include the amount added to the degreaser unit and the dates that the solvent was added. The record shall be maintained on a monthly and twelve-month rolling total bases. For the purposes of record keeping, the amount of solvent used shall be considered as the difference between the amount of solvent added and the amount of solvent removed. [06-096 CMR 115, BPT]

B. In accordance with 06-096 CMR 130, Section 3A, MEARNG shall follow equipment and operational standards when making use of the facility's parts degreaser. [06-096 CMR 130]

C. MEARNG shall be subject to the following compliance standards:

1. Immersion cold cleaning machines shall have a freeboard ratio of 0.75 or greater unless the machines are equipped with covers that are kept closed except when parts are being placed into or being removed from the machine.

2. Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:

a. Have a permanent, conspicuous label summarizing the operating requirements in Subsection c below;

b. Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches shall constitute an acceptable cover;

c. Cold cleaning machines shall be operated in accordance with the following procedures:

1. Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container;

2. Cleaned parts shall be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cold cleaning machine;

3. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray at a pressure that does not exceed 10 pounds per square inch gauge (psig);

4. The owner or operator shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip;

5. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the cold cleaning machine;

6. When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used;

7. Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately, and the wipe rags or other sorbent material shall be immediately stored in covered containers for disposal or recycling;

8. Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and

9. The owner or operator shall ensure that the solvent level does not exceed the fill line.

[06-096 CMR 130]

D. If, in the future, MEARNG switches to a solvent that contains less than 5% VOC for use in the parts washers, to satisfy record keeping requirements MEARNG need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at the Bangor facility.
[06-096 CMR 115, BPT, 06-096 CMR 130]

(22) MEARNG shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 31st DAY OF March 2009.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks for
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

The term of this Order shall be for five (5) years from the above signature date.

Date of initial receipt of application: **December 16, 2008**
Date of application acceptance: **January 7, 2009**

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Peter G. Carleton, Bureau of Air Quality